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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 933,675	08/22/2001	Kenta Kamoshida	HITA.0096	6668

7590

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EXAMINER

KENNEDY, JENNIFER M

ART UNIT

PAPER NUMBER

2812

DATE MAILED: 07/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,675

Applicant(s)

KAMOSHIDA ET AL.

Examiner

Jennifer M. Kennedy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: On page 4, line 8 of the specification "cars" should be changed to --scars--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 6, 7, 9, 10, 11, 12, 13, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

The examiner points specifically to "at an under layer of a dielectric film" for claim 3. Claims 6 recites "its terminal section is exposed from said protective film". The examiner suggests changing this to --its terminal section is exposed by etching a portion of said protective film--. The examiner points to the recitation of "at an upper layer" for claims 9-12, and to "at the same layer" as said scan signal line for claim 13. The examiner is not sure if this means the metallic counter voltage signal line is being formed from the same layer or at the same level as the scan signal line. Applicant's cooperation with respect to these grammatical corrections is appreciated.

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Claims 6 and 7 recite the limitation "its terminal section" in line 4. There is insufficient antecedent basis for this limitation in the claim. It is unclear which line the gate signal line or the drain signal line is being referred to when "its" terminal portion is exposed.

Claim 13 recite the limitation "plus orientation film" in line 23. There is insufficient antecedent basis for this limitation in the claim. An orientation film had not been positively recited before.

Claim 8 and 14 are rejected for being dependent on an indefinite rejected claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Aratani et al. (U.S. Patent No. 6,310,376).

Aratani et al. discloses a liquid crystal display device comprising, in a liquid crystal side pixel region of one substrate of respective substrates as disposed to oppose each other with a layer of liquid crystal material interposed there between, a thin film

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transistor which is driven by a scan signal from a gate signal line (3), a pixel electrode (9) to which an image signal from a drain signal is supplied via this thin film transistor, a protective film (10) formed to also cover the thin film transistor and the pixel electrode, and a resin film (11) formed on or over an upper surface of this protective film.

In re claims 2-5, Aratani et al. also discloses the device wherein a counter electrode for generation of a an electric field between itself and the pixel electrode and a counter voltage signal line for supplying a counter voltage thereto are formed on the one substrate side (see 9 and 2 on substrate 1), and wherein a counter electrode forming a pair together with the pixel electrode is formed at an under layer of a dielectric film for use as a gate insulation film (5) of the thin film transistor, wherein the resin layer is 1000 nm or less in layer thickness thereof (see column 6, lines 1-9), wherein the protective film is such that a contact hole is not formed in the pixel region .

Further, in re claims 9-12, Aratani et al. also discloses wherein a metal material layer is not formed in a display region which is an ensemble of the pixel regions at an upper layer than the resin layer of the substrate with the resin film formed thereon, wherein an electrode made of a conductive material is not formed in the display region at an upper layer than the resin layer, wherein those other than an orientation film (11) are not formed in the display region at an upper layer than the resin layer of the substrate (see Figures 2 and 8).

Finally, Aratani et al. also disclose wherein at least one of the gate signal line and drain signal line is comprised of either aluminum or a material containing it.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aratani et al. (U.S. Patent No. 6,310,676) in view of Ono et al. (U.S. Patent No. 6,356,331).

Aratani et al. disclose the device as claimed and rejected above, but does not disclose wherein at least one of the gate signal line and the drain signal line terminal section (SD1) is exposed from the protective film (PSV), and a transparent conductive material layer (PXITO2) is formed at such exposed portion and wherein the transparent conductive material layer comprises an ITO film. It would have been obvious to one of ordinary skill in the art at the time the invention was made to expose the drain signal line terminal section from the protective film and form an ITO layer in order to form a pixel electrode contacting the drain.

Allowable Subject Matter

Claim 13 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: the prior art, either singly or in combination, fails to anticipate or render obvious, the

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limitations of a protective film formed to cover the thin film transistor, said metallic drain electrode plus the pixel electrode, a resin film formed on or over the upper surface of this protective film, at least three layers of protective film, and resin film, plus orientation film are arranged to separate all metal layers from a liquid crystal layer in combination with the counter electrode being formed on the one substrate side with the metallic counter voltage signal line being formed at the same layer as the scan signal line in combination with all the other limitations claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer M. Kennedy whose telephone number is (703) 308-6171. The examiner can normally be reached on Mon.-Fri. 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on (703) 308-3325. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

jmk

jmk
July 11, 2003

John Niebling